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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,582	09/12/2003	Yasuji Seko	117159	5272
27074	7590	03/30/2005		
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER CHISDES, SARAH J	
			ART UNIT 2877	PAPER NUMBER

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,582

Applicant(s)

SEKO ET AL.

Examiner

Sarah J. Chisdes

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 is/are allowed.
- 6) ☒ Claim(s) 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/1/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The Information Disclosure Statement filed December 1, 2003 has been entered and the reference considered by the examiner.

Drawings

The drawings were received on December 1, 2003. These drawings are approved.

Specification

The disclosure is objected to because of the following informality: in the first line of the first paragraph in the Description of the Related Art, the term "tree"-dimensional is used. It was understood as "three"-dimensional. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by **Ogawa (5,640,241)**.

The "light source for emitting light" corresponds to the "light spot"(4) in Ogawa, the "detector" corresponds to the "image sensor" (2) in Ogawa, and the "calculator" corresponds to Ogawa's "image processing unit" (3), all in Figure 1. The "optical system having a spherical aberration for forming a concentrated area of the light" corresponds to the "cylindrical lens" (1) in the same figure. The phrase "having a spherical aberration" is understood to describe the optical system, and the optical system is understood to be that which forms the concentrated area of light. The

Art Unit: 2877

lens in Ogawa can be construed as an "optical system". All lenses have some inherent aberrations (no real lens is perfect), so the cylindrical lens can be seen as an "optical system having a spherical aberration." Moreover, Ogawa uses the spherical lens as an optical converter to convert the light spot unto a "linear image" (column 2, lines 25-26, and elsewhere), which is a concentrated area of light. Hence the cylindrical lens of Ogawa is an "optical system having a spherical aberration for forming a concentrated area of light".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa. Ogawa describes a system according to claim 18, but does not explicitly show a moveable element wherein the light source is mounted on the moveable element. However, in column 5, lines 4-5 and elsewhere, Ogawa describes the light source as being displaceable. The examiner takes Official Notice of the fact that the provision of a movable mount for the light source such as a optical pen used in the graphic design industry would have been known to those of ordinary skill in the art. It would be obvious to one of ordinary skill in the art to provide a light source which is being positionally tracked with a movable mount so that it may be moved by a user in a secured (i.e. non damaging) and optically unobtrusive manner.

Allowable Subject Matter

Claims 1-17 are allowed.

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination fails to disclose or render obvious an optical system wherein a spherical aberration is used explicitly to produce an area of light concentration (e.g., interference pattern) and the area of light concentration produced by the spherical aberration is used to monitor the position of a light source as claimed in claims 1 and 11; and a diffusion member placed between a optical system and a detector as claimed in claim 19.

Regarding **claim 18**, if the claim were to be amended to read an "optical system having a spherical aberration, wherein the spherical aberration forms a concentrated area of light", it may be allowable.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Falk et al. (4,627,722) discloses a similar method of monitoring the three-dimensional position of a light source, but uses a different means (i.e., interferometer) to produce the area of light concentration

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known

statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well-known statement was made.

Fax/Telephone Information

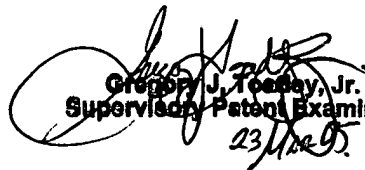
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah J. Chisdes whose telephone number is 571-272-8450. The examiner can normally be reached on Monday through Thursday 9-6:30, Friday 9-5:30, with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sarah J. Chisdes, Ph.D.
Examiner
Art Unit 2877

March 23, 2005


Gregory J. Tooley, Jr.
Supervisory Patent Examiner
23 Mar 05